GA 1.13 RCED-89-19

United States General Accounting Office

GAO

Report to Congressional Requesters

29

December 1988

CROP INSURANCE

FCIC Should Strengthen Actual Production History Program Controls

GAO/RCED-89-19

GAO

United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-209866

December 15, 1988

The Honorable Ed Jones
Chairman, Subcommittee on Conservation,
Credit and Rural Development
Committee on Agriculture
House of Representatives

The Honorable Glenn English
Chairman, Subcommittee on
Government Information, Justice,
and Agriculture
Committee on Government Operations
House of Representatives

In response to your requests, we have reviewed aspects of the Federal Crop Insurance Corporation's (FCIC) implementation of the Actual Production History (APH) Program. The purpose of this program is to base a farmer's insurance coverage on his or her individual production experience. Prior to the APH program, insurance coverages were based on production averages for the county in which a farm was located. As a result, the coverages often did not accurately reflect differences in individual farmers' production levels. Not having individualized insurance coverage was believed to have weakened the federal crop insurance program because it discouraged the most productive farmers—farmers who produced above the county average—from participating in the program. Conversely, it encouraged the less productive farmers to join the program. The APH program was intended to correct this problem and has been endorsed, in concept, by us as well as others. The program was fully implemented for all major crops in 1987.

The federal crop insurance program, including the APH program, is implemented largely through private insurance companies that are reinsured by FCIC. As a reinsurer, FCIC pays for most of the losses on policies sold by the private reinsured companies. These companies are reimbursed by FCIC for insurance sale and service activities, including adjusting claims (settling claims for any crop damages covered under the insurance policy). Additionally, the companies share in the gains and losses on the policies they sell.

In asking us to examine the APH program, you specifically requested that we determine whether FCIC had adequate procedures to ensure that the program resulted in accurate production guarantees. Your concern

about accurate production guarantees stemmed from our April 1987 testimony and subsequent report in which we identified millions of dollars in federal crop insurance overpayments that were due in many cases to incorrect production guarantees.[1]

A production guarantee, normally expressed in terms of pounds or bushels of product per acre, is the amount of crop production for which a farmer is insured and is established at the time a policy is written. Under the APH program, a production guarantee is based on a farmer's 10-year average production experience. In practice, FCIC allows farmers to certify up to 10 years of production data at the time a policy is written. In doing so, a farmer is stating that actual production records exist and will be available upon request. Accurate production guarantees are crucial to the overall success of the federal crop insurance program. For example, when a producer purchases insurance, production guarantees are part of the basis for establishing his or her premium. Inaccurate production guarantees could therefore result in too high or too low a premium. Further, because production guarantee information is an important part of FCIC's actuarial data base, inaccurate guarantees could affect the overall premium schedules that FCIC establishes for the crop insurance program. Finally, accurate production guarantees are important because, in the event of a loss, they form the basis for a claim payment.

Results in Brief

FCIC does not have adequate procedures to ensure that production guarantees established under the APH program are accurate. Initial FCIC reviews of selected APH guarantees indicated that they may be incorrect as much as 37 percent of the time. Most of the errors found by FCIC related to the accuracy of a farmer's individual production history data which he or she certifies without providing actual production records at the time a policy is written. FCIC currently relies on reinsured companies to detect errors in APH guarantees primarily through a sampling program in which selected guarantees are reviewed for accuracy. However, the accuracy of production guarantees is not always checked when a claim is made and paid. As a result, incorrectly certified production data—a major source of APH guarantee errors—may never be identified, which could result in incorrect loss payments.

[1] Assistant Comptroller General, RCED, J. Dexter Peach, testified on April 29, 1987, the report was entitled Crop Insurance: Overpayment of Claims by Private Companies Costs the Government Millions (GAO/RCED-88-7, Nov. 20, 1987).

APH Guarantees Are Frequently Inaccurate

In 1987, FCIC reviewed how well each of the reinsured companies implemented the APH program during its first year of operation. As part of these reviews, FCIC "spotchecked" the accuracy of APH guarantees and found a significant number of errors. For example, in 21 of these reviews, FCIC examined over 600 production guarantees and found that 254, or about 37 percent, were inaccurate. Of the 254 inaccurate guarantees, 80 percent were incorrect due to certified production data that either overstated or understated a farmer's actual production experience. To a lesser extent, production guarantee errors were a result of reinsured company personnel not applying appropriate FCIC procedures in computing the guarantee.

Reinsured companies also spotchecked production guarantees and found high rates of errors. For example, at the time of our review, 13 companies had reported the results of their spotchecks to FCIC. The companies found that 19 percent of the guarantees were incorrect.

The spotchecks conducted by FCIC and reinsured companies were the most current data available on the accuracy of APH guarantees at the time of our review. FCIC has requested that reinsured companies summarize the actions taken to correct errors found as a result of these spotchecks.

APH Procedures Need Strengthening

As a result of its 1987 reviews, FCIC developed more specific guidance for implementing the APH program. FCIC's basic approach to ensuring accurate APH guarantees did not significantly change with the new guidance. Rather, the guidance served to clarify and consolidate previous FCIC instructions on the subject. Under both the current and previous guidance, reinsured companies are primarily responsible for implementing FCIC procedures intended to ensure that production guarantees are accurate, that is, farmer-certified production data are supported by acceptable records and company personnel are computing the guarantees in accordance with FCIC procedures. To do this, FCIC requires reinsured companies to sample selected insurance policies and determine if the production guarantees are correct. Under the sampling procedures, a production guarantee may be reviewed as part of a 1-percent random sample or as a result of meeting one of several other criteria (e.g., exceeding the local county average crop production level by two times or more). In the event of a loss, FCIC requires that the guarantee be verified for accuracy only if it appears unreasonable.

We found that current procedures provide FCIC little assurance that reinsured companies are implementing effective sampling programs, that APH guarantees are correct, or that claim payments are accurate because:

- Reinsured companies are not required nor do they routinely report the results of their sample checks to FCIC. Consequently, FCIC is not routinely informed as to whether or not the reinsured companies are conducting the required sampling or, if so, what the results indicate. Without a routine reporting requirement and without knowing the results of each company's APH reviews, FCIC cannot take corrective action if (1) reinsured companies do not implement the sampling program in a timely manner or (2) the sampling results indicate widespread problems with the accuracy of the guarantees.
- FCIC has not issued guidance on how to interpret the significance of the results of sample checks or what actions to take if the samples indicate frequent or widespread problems. Lacking guidance, FCIC has little assurance that reinsured companies are identifying and acting on problems with APH guarantees in a manner that is consistent with what FCIC considers appropriate.
- In the event of a loss, the validity of APH guarantees is not always examined for accuracy. This is because the criteria that determines whether or not a guarantee will be reviewed at the time of a loss is simply the "reasonableness" of the guarantee. Such criteria can be widely interpreted. As a result, incorrectly certified production data, a major source of APH guarantee errors and reason for incorrect loss payments, may never be identified.

Conclusions

Accurate APH guarantees are crucial to the financial integrity of the federal crop insurance program because they form the basis for calculating insurance premiums and losses. The APH program was intended to individualize guarantees so that they better reflect differences in farmers' capabilities to grow crops. Prior to APH, production guarantees were based on countywide averages that penalized those farmers who produced above the average and benefitted those who produced below it. Under the APH program, these inequities were intended to be minimized because an individual farmer's own records are used to establish his or her personalized production guarantee.

We have endorsed the APH concept as a means for making the crop insurance program more actuarially sound. However, as the program now stands, FCIC lacks assurance that APH guarantees are accurate. Initial

spotchecks of APH guarantees by FCIC and reinsured companies indicate that the guarantees are frequently inaccurate, with most of the errors relating to the data farmers submit and certify without documentation at the time a policy is written. Reinsured company reviews of APH policies reflected similar results.

The current system for ensuring the accuracy of production guarantees relies primarily on the verification efforts of reinsured companies who sample a number of guarantees. Additionally, reinsured companies have been instructed to verify the accuracy of production guarantees that appear "unreasonable" at the time a claim is made. This system is new and still evolving. We believe, however, that certain aspects of the program need to be strengthened immediately. First, FCIC needs to routinely review the sampling results of the reinsured companies to assure itself that such sampling is being done and to also become aware of and be able to act on any problems the sampling might indicate. Second, FCIC needs to develop guidance for interpreting the results of the sampling. Although FCIC intended to detect patterns of abuse through the sampling program, it has not as yet established what frequency of errors constitutes such a pattern. As a result, interpretations of the sampling results are likely to vary and any actions taken on the basis of the sample results are likely to be arbitrary. Finally, FCIC needs to clarify guidance concerning which production guarantees should be verified in the event that losses occur. Currently, the verification of a guarantee is left to the discretion of the loss adjuster who determines whether the guarantee is reasonable or not. Consequently, the validity of guarantees, including the crop production data that is certified, may never be reviewed when a loss is claimed and a payment is made. We believe that, in the event of a claim, all production guarantees should be verified. This would help ensure that insurance claim payments, largely paid by the federal government, are accurate.

In addition to the above actions, FCIC needs to review the extent to which it relies on certified production data to support production guarantees. This is because inaccurate production guarantees affect not only loss payments but premium payments as well. Consequently, even if the production guarantees for all policies with losses are reviewed, incorrect premiums for policies without losses may not be identified. Because the program is new it is possible that the significant level of errors found in initial reviews of the APH guarantees may, in part, be a result of farmers and reinsured companies being unfamiliar with program practices and procedures. Nonetheless, FCIC needs to closely monitor trends in the

numbers and types of APH guarantee errors with the objective of determining whether or not it should continue to allow farmers to certify production data. If there is not significant improvement within the next year, FCIC should reduce or eliminate its reliance on certified data to support production guarantees.

Recommendations to the Secretary of Agriculture

We recommend that the Secretary of Agriculture require the FCIC Manager to:

- Require reinsured companies to report to FCIC the results of APH guarantee reviews that are conducted in connection with the current sampling requirements. This should include reporting the type and frequency of errors found during the reviews.
- Establish criteria for interpreting the significance of the frequency of errors found during the required sampling of APH guarantees and for deciding the actions that should be taken if tolerances for acceptable levels of errors are exceeded.
- Require that all APH guarantees be verified at the time of loss. Verification should include reviewing the supporting documentation for certified production data as well as for the calculation of the guarantee.
- Monitor the frequency of certification-related errors and reduce reliance on the certification process if such errors do not decrease. The latter could be achieved by significantly tightening the current sampling procedures. For example, rather than sampling all production guarantees that are twice the local average, as is currently the procedure, FCIC could review all guarantees that are some determined percentage less than twice the local average. Additionally, FCIC could add sampling criteria that would require review of all guarantees that could result in potential losses above an established monetary amount. Such criteria would help ensure that production guarantees for potentially large insurance claims are supported. A final alternative might be to completely eliminate the certificatioa feature of the APH program and require all farmers to provide production data at the time a policy is written.

Comments by FCIC Officials and Our Evaluation

We discussed a draft of this report, including our proposed conclusions and recommendations, with high-level FCIC officials who, speaking on behalf of the Corporation, indicated that FCIC generally agreed with the factual contents of the report. Regarding our recommendations, the officials stated that FCIC agreed with all but the one that would require every production guarantee to be verified at the time of loss. Concerning

this recommendation, FCIC believed that the verification of all guarantees at the time of loss would be cumbersome to the farmer and too labor-intensive to administer.

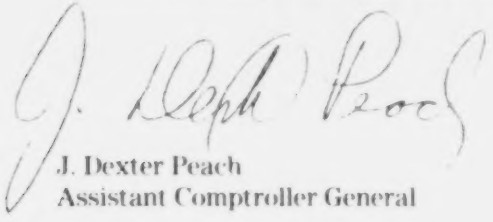
We recognize that APH regulations should not overburden either the farmer or FCIC. We also recognize that verifying production guarantees for each loss claim would add a certain amount of paperwork for FCIC, insurance companies, and farmers. However, we believe that relying upon certified data to support a key determinant of a claim payment does not provide FCIC with reasonable assurance that such payments are correct particularly in light of the high number of certification errors found by both FCIC and reinsured companies in their reviews of the accuracy of production guarantees. Further, we believe that the additional time necessary to examine supporting documentation for all production guarantees with losses could, if necessary, be minimized by spot-checking the supporting data from an individual production guarantee for several years rather than all 10 years. We, therefore, continue to believe that FCIC should require that all production guarantees be verified when a claim is made.

We conducted our review between November 1987 and June 1988 in accordance with generally accepted government auditing standards. The information contained in this report was obtained primarily through interviews with FCIC headquarters officials and field staff and from documents they provided. We discussed the contents of this report with top FCIC officials and have incorporated their comments where appropriate. However, as you requested, we did not obtain written agency comments on a draft of this report.

Our findings, as well as our objective, scope, and methodology are discussed in more detail in appendixes I through III.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of this report until 2 days after the date of this letter. At that time we will send copies to the Secretary of Agriculture; the Manager, FCIC; the Director, Office of Management and Budget; and other interested parties. This work was done under the

general direction of John Harman, Associate Director. Other major contributors to this report are listed in appendix IV.



J. Dexter Peach
Assistant Comptroller General

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Abbreviations

ACP	Area Coverage Plan
APH	Actual Production History
FCIC	Federal Crop Insurance Corporation
GAO	General Accounting Office
USDA	U.S. Department of Agriculture

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Background

Crop insurance has been available to American farmers for 50 years. Before 1980, however, crop insurance was available only on a limited basis, covering certain commodities and selected counties. The Federal Crop Insurance Act of 1980 (Public Law 96-365) expanded the program greatly by authorizing an all-risk, all-crop, nationwide program. Now, federal crop insurance is available in virtually every agricultural county in the continental United States and is intended to be the primary federal disaster assistance program for farmers. The program is administered by the U.S. Department of Agriculture's (USDA) Federal Crop Insurance Corporation (FCIC), a government-owned corporation created in 1938.

The Actual Production History (APH) Program is an important aspect of FCIC's insurance program because it establishes insurance coverages for individual farmers. Under the APH program, insurance coverages are based upon an individual farmer's actual production history. Each farmer's production history is based on 10 years of production experience. Prior to the APH program, insurance coverages did not reflect each farmer's production experience but rather were based on production averages for the county where the farm was located. The APH program was first implemented for all major crops in 1987.

The 1980 act requires, among other things, that the crop insurance program be actuarially sound, with premium income sufficient to cover losses and to eventually establish a reasonable reserve against unforeseen losses. The act also requires that FCIC, to the maximum extent possible, involve the private sector in delivering insurance to farmers, including a program of reinsurance of private insurance companies whereby most of the risk is transferred from the private insurance company to FCIC.

Prior to the 1980 act, crop insurance was sold by FCIC using its employees, employees of USDA's Agricultural Stabilization and Conservation Service, and a small number of independent agents. FCIC employees adjusted all loss claims. In response to the legislative mandate for greater private sector involvement, FCIC now uses two systems to deliver crop insurance to farmers—master marketers and reinsured companies. Master marketers are private insurance companies that sell and service crop insurance on FCIC's behalf, but who are not responsible for loss adjustments. Under this arrangement, FCIC is responsible for all gains and losses on the policies. Like master marketers, reinsured companies also sell and service crop insurance. However, unlike master marketers, reinsured companies are responsible for adjusting losses and also share

in the gains or losses resulting from the insurance sold. As a reinsurer, FCIC is responsible for most of the losses related to policies sold by reinsured companies. In 1987, reinsured companies accounted for about 85 percent of the insurance sold.

During the period 1981 through 1987, FCIC has experienced financial problems and has operated at a net loss of about $1.1 billion. Total indemnities paid to farmers totaled about $3.8 billion, while premium income totaled about $2.7 billion.

How Crop Insurance Works

Crop insurance can help mitigate the effects of crop losses caused by unavoidable natural hazards, such as insects, drought, and freezing temperatures, but it does not insure profit or cover losses due to farmer negligence or failure to observe appropriate farming practices. Participation by farmers is voluntary. If a farmer decides to purchase crop insurance, the insurance is generally provided at three coverage levels—50, 65, or 75 percent of production—and at three different price levels. The price level elections are made in advance by each insured farmer. They represent a percentage of the projected market price for the crop insured.

The way that crop insurance works can best be illustrated with an example. Assume a farmer with a historical average production of 100 bushels of corn per acre selects the 65-percent coverage level. The production that the farmer is guaranteed by FCIC—the production guarantee—is then 65 bushels per acre (65 percent of 100 bushels). Also, assume that the farmer selected a price option of $1.50 per bushel.[1] If a loss occurs due to an insurable cause, and the actual production falls to 20 bushels per acre, the farmer would have an insured loss of 45 bushels per acre (the production guarantee of 65 bushels less actual production of 20 bushels). FCIC would then pay the farmer $67.50 ($1.50 x 45 bushels) per acre insured. Since premiums are due at the time of harvest, the insured farmer's premium would be deducted from the amount of payment. A farmer's premium rate depends on a number of factors like number of acres, production guarantee level, or price selections.

[1]Crop insurance is provided at three alternative price levels. One of the price selections must be at least 90 percent of the commodity's estimated market price at harvest time; the other two levels are at lesser amounts.

Insurance Protection Becomes More Personalized

The production guarantee—amount of production for which a farmer will be insured—is established at the time insurance is sold. It is a primary component in establishing the amount of insurance premium and liability if an insured crop fails due to an insurable cause. Thus, inaccurate production guarantees could result in premiums that are too high or too low as well as incorrect claim payments. Further, production guarantee information is an important part of FCIC's actuarial data base and, as such, needs to be as accurate as possible in order for FCIC to establish appropriate premium schedules for the overall crop insurance program.

Until recently, an individual farmer's production guarantee was based on countywide, average crop yields for the locations that were farmed rather than on the farmer's own production experience. In determining a farmer's production guarantee, FCIC would typically use 10 years of county crop yield data to calculate a county average yield. Each year FCIC would review and periodically update the data and change the county averages accordingly. This approach for determining insurance coverage was known as the Area Coverage Plan (ACP).

After using county average yields for many years, FCIC management, ourselves, and others identified a major shortcoming. Specifically, ACP encouraged producers with a crop yield lower than the average for their area to enter the program because they would get an inflated production guarantee. Conversely, ACP discouraged farmers with higher yields from entering the program because their guaranteed production would be less than they would actually have produced. This problem is generally known as "adverse selection" and has contributed to the overall increase in losses experienced by FCIC. The problem of adverse selection and how it is corrected under APH is illustrated in table I.1 and the following discussion.

Table I.1: Hypothetical Example Depicting Difference in Yield Guarantees Under the ACP and the APH Program

Bushels per acre	Farmer Jones	Farmer Brown
Area Coverage Plan		
Actual average yield	75	125
Guaranteed yield	75	75
Loss needed to have claim	1	51
Actual Production History Program		
Actual average yield	75	125
Guaranteed yield (75 percent)	56	94
Loss needed to have claim	20	32

Assumes an area average yield of 100 bushels of corn per acre and insurance coverage level selection of 75 percent

Source: FCIC data developed for GAO

As shown in table I.1, farmers Jones and Brown would be guaranteed the same production level under ACP, 75 bushels of corn per acre (75 percent of 100 bushels). Hence, farmer Jones could file a claim for a production loss of only 1 bushel per acre below his actual average yield of 75 bushels while farmer Brown would have to suffer a loss of 51 bushels per acre below his actual average yield of 125 bushels before filing a claim. Also, both farmers would be charged the same premium per acre, assuming the same price guarantee selection. Therefore, it is clear why farmer Jones would be more likely to participate in the insurance program than farmer Brown.

Under the APH program, farmer Jones' guarantee would be 56 bushels per acre (75 percent of 75 bushels) and farmer Brown's guarantee would be 94 bushels (75 percent of 125 bushels). Thus, farmer Jones could file a claim with a production loss of 20 bushels per acre, or a decrease in production of about 27 percent, and farmer Brown could file a claim with a loss of 32 bushels, or a decrease of about 26 percent. As table I.1 shows, under the APH program, both farmers would have to suffer about the same percentage loss to be eligible to file a loss claim.

The APH program went into effect for all major crops in 1987 and was intended to help resolve the problems created by adverse selection. Under this program, production guarantees are based on each farmer's 10-year actual production history. Unlike county-average yields, the APH program results in individualized production guarantees that more accurately reflect differences in various farmers' production capabilities. To

reduce paperwork and increase program participation, FCIC allows farmers to certify up to 10 years of production data used to develop an APH guarantee. There is no verification of this data at the time a policy is written. In certifying production data, farmers, in effect, state that the data are supported by verifiable records.

Objective, Scope, and Methodology

The concern over FCIC's process for establishing production guarantees stems from hearings held by the Subcommittee on Conservation, Credit, and Rural Development, House Committee on Agriculture, on April 29, 1987. In testimony before the Subcommittee, we provided the results of our review of FCIC's loss adjustment procedures. At that time, we reported, among other things, that the loss adjustments by reinsured companies were often done incorrectly, resulting in millions of dollars in overpayments. We also reported that inaccurate production guarantees represented one of the biggest problem areas. As a result of this work, the Chairman, Subcommittee on Conservation, Credit, and Rural Development, House Committee on Agriculture, and the Chairman, Subcommittee on Government Information, Justice and Agriculture, House Committee on Government Operations, asked us to review the implementation of the APH program. Our specific objective was to determine whether FCIC has established adequate procedures to ensure the accuracy of farmers' production guarantees.

To accomplish our objective, we (1) reviewed relevant FCIC documents concerning APH procedures and regulations, (2) discussed the strengths and weaknesses of procedures intended to ensure accurate production guarantees with agency personnel, and (3) analyzed the results of internal reviews of the accuracy of APH guarantees that were conducted by FCIC and reinsured companies. We also obtained and examined FCIC policy, procedure, and loss adjustment manuals; reviewed correspondence with private reinsured companies; and reviewed FCIC's standard contract agreements with the reinsured companies for APH-related requirements.

In discussing the strengths and weaknesses of program procedures for ensuring accurate APH guarantees, we met with agency personnel at (1) FCIC's Underwriting and Actuarial Divisions in Kansas City, Mo., (2) 4 of

See Results of GAO's Review of the Department of Agriculture's Federal Crop Insurance Program (GAO/T-RCED-87-18).

11 FCIC Field Underwriting Offices (Springfield, Ill.; Jackson, Miss.; Billings, Montana; and Raleigh, N.C.), and (3) FCIC headquarters in Washington, D.C. In Kansas City, we spoke with the directors of the previously mentioned divisions and their staff because they were key in establishing and implementing the APH procedures. We discussed the program with staff at selected Field Underwriting Offices because they had experience in verifying APH guarantees and, therefore, were knowledgeable about the strengths and weaknesses of the procedures. At FCIC headquarters, we discussed the program with FCIC's Manager, Deputy Manager, and Assistant Managers for Program Administration and Compliance.

To obtain a perspective on the accuracy of APH guarantees, we analyzed the results of spotchecks of these guarantees that were conducted by FCIC and reinsured companies. The spotchecks were part of FCIC's overall effort to determine how well reinsured companies were implementing the APH program and its procedures. In doing so, FCIC visited each reinsured company and examined a sample of selected insurance policies to see if the determination of the 1987 APH guarantees were done correctly. We analyzed the results of these samples at 21 of 39 reinsured companies.[1] Our analysis included categorizing the types of errors FCIC found as well as their frequency. We also examined the results of the spotchecks that were conducted by reinsured companies. These checks were part of a quality control program required by FCIC procedures and are the program's primary means for detecting problems concerning the accuracy of APH guarantees. At the time of our review, measurable data summarizing the results of these checks were available for only 13 of the reinsured companies. We did not evaluate the methodology used by either FCIC or the reinsured companies in conducting the reviews, nor did we verify the accuracy of their findings.

We discussed the contents of this report with FCIC officials responsible for administering the APH program, and their comments are reflected in the report as appropriate. Our work was conducted between November

[1]These offices were selected to provide geographic coverage and coverage of major insured crops, including corn, soybeans, wheat, and other grains.

[2]FCIC reviewed the APH programs of 30 reinsured companies. However, some of those reviews also examined other aspects of a company's operations such as its loss adjustment function. We analyzed only those reviews that concentrated solely on the APH program because they generally contained greater detail on the extent to which program procedures were implemented and sampled a larger number of APH policies. The APH reviews that we examined included companies that represented about 70 percent of all the 1987 crop insurance written by reinsured companies.

1987 and June 1988 in accordance with generally accepted government auditing standards.

APH Guarantees Are Frequently Inaccurate

FCIC and reinsured companies have spotchecked the accuracy of selected production guarantees and found frequent errors. Our analysis of FCIC spotchecks, for example, showed that about 37 percent of the APH crop insurance policies FCIC reviewed were inaccurate. Most of the errors were related to inaccurate production information that farmers certified correct at the time the policy was written. Reinsured companies' reviews also showed high error rates. The frequency of errors found by FCIC and reinsured companies raise serious questions as to whether the current APH program results in production guarantees that accurately reflect an individual farmer's production—a key purpose of the program. Accurate production guarantees are not only a primary objective of the APH program, but are also essential to the actuarial soundness of the crop insurance program.

FCIC Reviews Reveal Frequent APH Errors

From July through October 1987, FCIC evaluated how well each reinsured company carried out its APH functions during the first year the program was implemented. Among other things, FCIC reviewed a sample of crop insurance policies to determine if the production guarantees established using actual production histories were accurate. We analyzed the results of the FCIC reviews conducted at 21 reinsured companies and found that the production guarantees were frequently incorrect. More specifically 254, or about 37 percent, of the 679 APH guarantees FCIC reviewed were inaccurate. Most of the errors FCIC identified related to the accuracy of a farmer's individual production data that he or she certified as correct at the time the insurance policy was written. These types of errors were found in about 80 percent of the 254 incorrect APH guarantees. The errors involved both over and underreporting of actual production.

About 26 percent of the 254 incorrect production guarantees contained errors related to reinsured company personnel incorrectly calculating the guarantees. The types of errors made included: assigning incorrect

At the time of our review, these were the most recently completed FCIC evaluations of how well all reinsured companies implemented the APH program. Based in part on the results of these evaluations, FCIC in May 1988 developed more specific implementing guidance for reinsured companies. FCIC's basic approach to ensuring accurate guarantees did not radically change under the new guidance. Rather the guidance served to clarify and consolidate existing instructions. Our evaluation of the new guidance is discussed later in this report.

As explained earlier, FCIC reviewed the APH programs of 39 reinsured companies. However, some of these reviews were aimed primarily at examining other aspects of a company's operations such as its loss adjustment function. We analyzed only those reviews that concentrated solely on the APH program because they generally contained greater detail on the extent to which program procedures were implemented and sampled a larger number of APH policies.

production estimates for those years in the 10-year production history for which actual production records did not exist, using production estimates in the 10-year production history when actual production data were available and should have been used, and arithmetic mistakes.

Table II.1 summarizes the results of the 21 APH reviews that we examined. The reviews examined production guarantees for crop year 1987 and counted errors only if they affected one year's production by 5 percent or more.

Table II.1: Summary of Errors Found During FCIC's APH Reviews

	A	B		C		D	
Company	Total Guarantees Reviewed	Total Guarantees with Errors	B/A (percent)	Guarantees with Producer Certification Errors	C/B (percent)	Guarantees with errors unrelated to Certification	D/B (percent)
A	30	11	36.7	10	90.9	1	9.1
B	9	6	66.7	6	100.0	0	0
C	13	0	0.0	0	0.0	0	0
D	28	3	10.7	2	66.7	1	33.3
E	75	32	42.7	19	59.4	17	53.1
F	26	8	30.8	8	100.0	0	0
G	12	1	8.3	0	0.0	1	100.0
H	10	2	20.0	1	50.0	1	50.0
I	80	41	51.3	32	78.0	9	22.0
J	7	7	100.0	6	85.7	1	14.3
K	12	5	41.7	4	80.0	1	20.0
L	52	34	65.4	26	76.5	13	38.2
M	15	13	86.7	12	92.3	1	7.7
N	15	8	53.3	8	100.0	0	0
O	17	9	52.9	9	100.0	2	22.2
P	28	16	57.1	16	100.0	4	25.0
Q	65	32	49.2	32	100.0	0	0
R	26	5	19.2	3	60.0	3	60.0
S	127	18	14.2	8	44.4	10	55.6
T	12	2	16.7	2	100.0	0	0.0
U	20	1	5.0	0	0	1	100.0
Total	**679**	**254**[a]	**37.4**	**204**	**80.3**	**66**	**26.0**

[a]The sum of (1) guarantees with producer certification errors and (2) guarantees with errors unrelated to certification exceeds the total number of guarantees with errors because some guarantees contained both types of errors.

FCIC did not determine as part of its review the overall dollar effect that the inaccurately certified production data had on the 1987 production guarantees, the premiums that the farmers were charged, or the indemnities that may have been paid to farmers who had losses in 1987. However, the following example, which is based on information from an actual FCIC APH review, illustrates the potential effects in each of these three areas.

A grain sorghum farmer certified that he planted 512 acres in 1986, which produced an average of 41 bushels per acre. However, FCIC determined that the farmer actually planted 538 acres, averaging only 37 bushels per acre. The impact of this and other errors on the farmer's 10-year historical production average was a reduction in the farmer's 1987 production guarantee of 2 bushels per acre, which, in turn, could translate into significant overpayments in the event of a loss. For example, if the (1) farmer planted the same amount of acres in 1987 that were planted in 1986, (2) price per bushel was $1.85, and (3) farmer experienced a loss, the farmer would be overindemnified by $1,990.60 (538 acres x 2 bushels per acre x $1.85 per bushel). In addition, because the insurance premium is based, in part, on the amount of the production guarantee, the farmer probably did not pay the correct premium.

Reinsured Companies Find Numerous APH Errors

Like FCIC, reinsured companies found a significant number of errors in the production guarantees they reviewed. As part of its internal controls, FCIC requires reinsured companies to check selected APH insurance policies to ensure that the production yields are calculated in accordance with FCIC procedures and that the production certifications are supported. In early 1988, FCIC asked reinsured companies to provide a summary of the results of checks made on 1987 APH policies. This was the first year that reinsured companies were required to conduct the spot-checks. As of October 1988, 13 of the companies had provided FCIC with measurable data showing that, of 5,206 guarantees reviewed, 992, or 19 percent, contained inaccuracies. FCIC sent followup letters to those companies that did not provide the requested data, advising them that it needed the information to verify compliance with the sampling procedures. FCIC has also asked the companies to summarize the actions taken to correct discrepancies found during APH reviews.

Although we were unable to determine how many of the 992 inaccurate guarantees were a result of inaccurate farmer-certified data, several companies provided data and made statements in their responses that indicated that farmer-certified data was a significant problem. For

example, one company stated that it had audited 8.9 percent of the total insurance policies it had written for the 1987 crop year and found that by far the greatest problem was due to inaccurate farmer-certified data.

FCIC Needs to Strengthen Procedures to Ensure More Accurate Production Guarantees

Currently, FCIC relies primarily on reinsured companies to ensure that APH guarantees are accurate—that farmer certified production data are supported by acceptable records and company personnel are computing the guarantees in accordance with FCIC procedures. To do so, reinsured companies are required to sample selected insurance policies to determine if the APH production guarantees are correct and, in the event of a loss, verify the accuracy of guarantees that appear unreasonable. This system, however, provides FCIC little assurance that reinsured companies are implementing effective sampling programs, that guarantees are correct, or that claim payments are correct because:

- Reinsured companies do not routinely report the results of their sample checks to FCIC. Consequently, FCIC may not know whether or not the reinsured companies are implementing the sampling requirements or, if so, what the results indicated. Without a routine reporting requirement, FCIC is not in a position to take corrective action if (1) reinsured companies do not implement the sampling program in a timely manner or (2) the sampling results indicated widespread problems with the accuracy of guarantees.
- FCIC has not issued guidance on how to interpret the significance of the results of the sample checks or what actions to take if the sample indicates widespread problems. Without guidance, FCIC has little assurance that reinsured companies are identifying and acting on problems with APH guarantees in a manner that is consistent with what FCIC considers appropriate.
- In the event that a loss is claimed, many APH guarantees may not be examined for accuracy. This is because FCIC's criteria that determines whether or not a guarantee will be reviewed at the time of a loss is simply the "reasonableness" of the guarantee. Such criteria can be widely interpreted. As a result, incorrectly certified production data—a major source of APH guarantee errors, may never be identified and could form the basis for incorrect loss payments.

Sample Results Not Routinely Reported to FCIC

Reinsured companies are responsible for sampling the accuracy of APH guarantees. The sampling program is intended to assure company management that there is no general pattern of abuse or error either by farmers who certify production data or by company personnel who compute the guarantees. FCIC, however, does not require that the results of the samples be reported to it. Consequently, FCIC is not routinely informed as to whether or not the companies are conducting the required sampling as well as what the sample results indicate.

FCIC's current annual sampling procedure calls for reinsured companies to verify that the farmer has records supporting certified production and that the production guarantee was computed in accordance with FCIC procedures for each policy selected as part of the sample. The sample is selected based on the following criteria:

- A 1-percent random sample of all policies.
- All policies having an approved production guarantee equal to or greater than 200 percent of the county average production.
- Every third policy with an approved production guarantee equal to or greater than 150 percent but less than 200 percent of the county average production.
- All policies on which the insured is affiliated with the reinsured company, or other potential conflict of interest exists, and a loss is claimed on that policy.
- A minimum of two policies per agent at least once every 3 years.

FCIC does not require reinsured companies to routinely report the results of the sampling they conduct. Instead of a routine reporting requirement, FCIC plans to examine the results of the APH policy sampling as part of its annual, comprehensive review of a reinsured company's overall operations. In general, these onsite reviews are intended to determine whether reinsured companies are in compliance with all FCIC policies and procedures concerning the sale and service of crop insurance. Such reviews, however, may not be frequent enough, or timed correctly, to provide FCIC the information it needs to effectively oversee and monitor the sampling program. For example, one reason that FCIC needs the sampling results is to assure itself that reinsured companies are implementing the program in a timely manner. Under the planned system, however, FCIC would not be alerted to potential problems in this area until a comprehensive review was completed. For some companies, this may not occur until late in a year. As a result, FCIC would not have the necessary information to take prompt corrective action.

The need for routine reporting to ensure prompt implementation of the sampling program takes on additional significance in view of the limited number of companies that carried out the first year's sampling program in a timely manner. For example, a November 1987 FCIC report on the overall implementation of the APH program noted that 34 percent of the companies had not begun the sampling program at the time that FCIC reviewed the program, 41 percent had just begun, and only 25 percent were completing the sampling in a timely manner. Routine reporting

requirements could have alerted FCIC to act in instances where reinsured companies were not implementing the sampling requirements promptly.

Further Guidance Needed for Interpreting Sample Results

According to FCIC program guidance, the principal purpose of the sampling program is to identify "patterns of abuse or error" either on the part of farmers reporting production data or company personnel in computing APH production yields. However, FCIC has not defined what frequency of errors found during the sampling process would constitute a "pattern of abuse or error." Further, FCIC has not provided guidance on what a reinsured company should do if its sampling reveals a high number of errors. As a result, FCIC has little assurance that reinsured companies are consistently identifying or acting on potential problems uncovered as a result of the sampling process. The need for such guidance is particularly pressing given the frequent errors found by FCIC and reinsured companies.

The previously mentioned November 1987 FCIC report also noted the need for guidance in interpreting sample results. The report recommended that FCIC develop procedures for doing additional sampling when error rates over a specified level are found during the initial sample. Such procedures had not been implemented at the time of our review.

Production Guarantees Not Verified at Time of Loss

Under current FCIC procedures, the validity of production guarantees, including the production data certified by farmers, may not be examined if a claim is made on the policy. This is because FCIC requires loss adjusters to examine the validity of the guarantee only if the guarantee appears "unreasonable." As a result, FCIC may be paying claims that are based on incorrect production guarantees. This is of particular concern in light of (1) the large number of production certification errors found by FCIC and reinsured companies and (2) a previous report by us indicating frequent overpayments resulting from inaccurately determined production guarantees.[1]

FCIC does not require that all production guarantees be verified at the time an insurance claim is made. Instead, it requires that loss adjusters for reinsured companies check the production guarantee for reasonableness. If the guarantee appears unreasonable, the loss adjuster is suppose

[1]Crop Insurance: Overpayment of Claims by Private Companies Cost the Government Millions (GAO/RCED-88-7, Nov. 20, 1987).

to verify the farmer's certified production against actual production evidence. However, FCIC has not clearly defined what is reasonable and what is not. As a result, there is little assurance that loss adjusters are verifying the appropriateness of all guarantees that they should be.

Further, we believe that some inaccurate production guarantees might not be considered unreasonable by the loss adjuster. The production guarantee would therefore be considered valid, and an inappropriate indemnity would be paid by FCIC to the farmer. For example, in the illustration discussed earlier, the difference of 2 bushels per acre between the production guarantee in the policy established using the farmer's certified production for crop year 1986 and the production guarantee determined by FCIC using actual production evidence may not have been considered unreasonable by the adjuster. However, even this relatively small overstated production guarantee of 2 bushels per acre could have resulted in an overpayment of about $2,000 to the farmer.

The current uncertainties over whether or not a production guarantee will be verified in the event of a claim are of particular concern in light of previous findings indicating that (1) farmer-certified production data are frequently incorrect and (2) production guarantees are a significant source of errors in overpaid claims. As indicated earlier, FCIC found that about 37 percent of the APH guarantees it reviewed contained errors—most of which were related to the production information certified by farmers. Additionally, our 1987 crop insurance report noted that incorrectly determined production guarantees contributed significantly to millions of dollars in overpayments by FCIC. Specifically, the report noted that 95 percent of 134 claims we reviewed were adjusted improperly and that more than half the loss adjustment errors found involved the determination of production guarantees.

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